

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave. St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000060**Date Inspected:** 16-Jan-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Huang Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Bid 52, 55 Tower and Girder**Summary of Items Observed:**

Office of Structural Materials Quality Assurance Inspector (QA), Mark Wright was present as requested to observe quality control functions related to procedure qualification record (PQR) testing at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The Caltrans Quality Assurance (QA) Inspector was present as requested to witness the mechanical testing Charpy Vee Notch (CVN) of HP2006137 Procedure Qualification (PQR) test plate. The test appeared to comply with the contract documents. The Caltrans QA Inspector issued a lot number of B41-017 for the CVN test ran on this date. The Caltrans Quality Assurance (QA) Inspector was present as requested to witness the welding of a Procedure Qualification (PQR) test plate using Flux Core Arc Welding (FCAW), using E71T-1 1.4mm electrode, in the 2F (horizontal) position. The welding was performed per the AWS D1.5, Section 5.10.3 fillet weld soundness requirements. The welding appeared to not to comply with the contract documents due to weld ran out of PQR parameters. The lot number was B41-014-07.

The Caltrans Quality Assurance (QA) Inspector was present as requested to witness the mechanical testing of HP2006136-1 Procedure Qualification (PQR) test plate. The QA Inspector observed tensile test on reduced sections and all weld metal specimens along with CVN, side bends and macro etch test. The test was performed per the AWS D1.5, Section 5.18 requirements. The lot number issued was B41-016-07.

Later on this date, the Caltrans QA Inspector observed the second attempt at the fillet weld soundness test HP2006126-1. The test was found not to comply due to lack of penetration (LOP) into the root. The lot number issued was B41-018-07.

**Summary of Conversations:**

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## WELDING INSPECTION REPORT

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See Task Leader journal for this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Wright,Mark	Quality Assurance Inspector
<b>Reviewed By:</b>	McClary,David	QA Reviewer

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